Performance Data Sheet

AE4430Y-XN1A

General Information

Model	AE4430Y-XN1A	**Refrigerant**	R-134a
Test Condition	EN12900 ASERCOM	**Performance Test Voltage**	220V ~ 50HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°C)		Condensing Temperature (°C)			
		30	40	50	60
-15	Watts (Capacity)	364	317	259	199
	Watts (Power)	235	248	257	261
	Amps	2.33	2.34	2.34	2.34
	Lb/h	7.43	7.03	6.34	5.51
-10	Watts (Capacity)	468	413	347	279
	Watts (Power)	250	265	278	287
	Amps	2.35	2.35	2.36	2.37
	Lb/h	9.54	9.17	8.50	7.67
-6.7	Watts (Capacity)	548	485	412	336
	Watts (Power)	259	277	293	305
	Amps	2.37	2.37	2.38	2.40
	Lb/h	11.2	10.8	10.1	9.27
-5	Watts (Capacity)	593	526	448	368
	Watts (Power)	264	283	301	315
	Amps	2.38	2.38	2.40	2.41
	Lb/h	12.1	11.7	11.0	10.2
0	Watts (Capacity)	743	659	565	469
	Watts (Power)	276	300	323	343
	Amps	2.40	2.42	2.44	2.47
	Lb/h	15.2	14.8	14.0	13.1
5	Watts (Capacity)	922	817	703	585
	Watts (Power)	285	315	344	371
	Amps	2.42	2.45	2.49	2.54
	Lb/h	19.1	18.5	17.6	16.5
7.2	Watts (Capacity)	1010	895	770	643
	Watts (Power)	287	320	353	382

	Amps	2.43	2.46	2.51	2.57
	Lb/h	21.0	20.4	19.4	18.2
10	Watts (Capacity)	1130	1000	863	722
	Watts (Power)	289	326	362	397
	Amps	2.43	2.48	2.54	2.61
	Lb/h	23.7	23.0	21.9	20.6
15	Watts (Capacity)	1380	1220	1050	881
	Watts (Power)	287	331	376	419
	Amps	2.43	2.50	2.58	2.68
	Lb/h	29.2	28.2	27.0	25.5

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	8.710250E+02	2.121931E+02	2.483997E+00	1.325513E+01
C2	4.417980E+01	-4.182702E-01	2.184284E-03	7.241745E-01
C3	1.911638E-01	1.573999E+00	-7.079263E-03	1.763997E-01
C4	8.229781E-01	-1.184245E-01	-3.612400E-04	1.628208E-02
C5	-3.863140E-01	6.851161E-02	-3.771364E-07	-6.822904E-04
C6	-1.818428E-01	2.717188E-02	1.736932E-04	-4.347717E-03
C7	4.818324E-03	-1.826675E-03	-6.783111E-06	1.472472E-04
C8	-8.442932E-03	1.728043E-03	8.934682E-06	-9.169442E-05
C9	1.808695E-04	5.494240E-04	2.931402E-06	-1.410504E-05
C10	1.114598E-03	-2.839695E-04	-9.781431E-07	2.257797E-05

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature

Performance Data Sheet

AE4430Y-XN1A

General Information

Model	AE4430Y-XN1A	**Refrigerant**	R-134a
Test Condition	ASHRAE	**Performance Test Voltage**	230V ~ 60HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	**90**	**100**	**110**	**120**	**130**	**140**
5	Btu/h	1600	1460	1330	1200	1080	963	847
	Watts	236	244	251	259	265	269	271
	Amps	1.83	1.83	1.84	1.86	1.88	1.89	1.90
	Lb/h	20.4	19.5	18.6	17.8	16.9	16.1	15.1
10	Btu/h	1840	1700	1550	1420	1280	1150	1020
	Watts	252	259	267	275	282	288	291
	Amps	1.87	1.87	1.88	1.90	1.92	1.94	1.95
	Lb/h	23.6	22.7	21.8	21.0	20.1	19.2	18.2
15	Btu/h	2120	1950	1800	1650	1500	1350	1200
	Watts	266	274	283	292	300	307	312
	Amps	1.90	1.91	1.93	1.95	1.97	1.99	2.00
	Lb/h	27.1	26.2	25.3	24.4	23.5	22.5	21.4
20	Btu/h	2420	2240	2070	1900	1730	1570	1400
	Watts	279	289	299	309	319	327	333
	Amps	1.94	1.95	1.97	2.00	2.02	2.05	2.06
	Lb/h	31.0	30.1	29.2	28.2	27.2	26.2	25.0
25	Btu/h	2740	2550	2360	2170	1980	1800	1610
	Watts	292	302	314	325	337	347	355
	Amps	1.98	1.99	2.02	2.05	2.08	2.11	2.13
	Lb/h	35.3	34.3	33.4	32.4	31.3	30.2	28.9
30	Btu/h	3100	2890	2680	2470	2260	2050	1840
	Watts	303	315	328	341	354	367	377
	Amps	2.01	2.03	2.06	2.10	2.13	2.17	2.21
	Lb/h	40.0	39.0	38.0	36.9	35.8	34.5	33.1
35	Btu/h	3490	3260	3020	2790	2550	2320	2090
	Watts	312	326	341	356	372	386	399
	Amps	2.04	2.07	2.10	2.15	2.19	2.24	2.28
	Lb/h	45.2	44.2	43.1	41.9	40.7	39.3	37.8
40	Btu/h	3920	3660	3390	3130	2880	2620	2350
	Watts	320	336	353	371	388	405	421
	Amps	2.07	2.10	2.14	2.19	2.25	2.31	2.36
	Lb/h	50.9	49.8	48.6	47.4	46.0	44.5	42.8

45	Btu/h	4380	4090	3800	3510	3220	2930	2640
	Watts	326	344	363	384	404	424	442
	Amps	2.08	2.13	2.18	2.24	2.31	2.37	2.44
	Lb/h	57.1	56.0	54.7	53.3	51.8	50.2	48.3
50	Btu/h	4870	4550	4230	3920	3600	3270	2950
	Watts	330	350	372	395	419	442	463
	Amps	2.09	2.15	2.21	2.28	2.36	2.44	2.52
	Lb/h	64.0	62.7	61.3	59.8	58.2	56.4	54.4
55	Btu/h	5410	5060	4700	4350	4000	3640	3280
	Watts	331	355	380	406	432	459	484
	Amps	2.10	2.16	2.23	2.32	2.41	2.50	2.60
	Lb/h	71.4	70.1	68.6	66.9	65.1	63.1	60.9
60	Btu/h	5980	5600	5210	4820	4430	4040	3640
	Watts	331	357	385	415	445	474	503
	Amps	2.09	2.16	2.25	2.35	2.45	2.56	2.67
	Lb/h	79.5	78.0	76.4	74.6	72.6	70.5	68.1

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.749603E+03	2.607117E+02	2.451030E+00	2.997087E+01
C2	5.008247E+01	4.076010E+00	1.452751E-02	3.715752E-01
C3	-2.220113E+01	-2.427445E+00	-2.083708E-02	-2.366820E-01
C4	8.296469E-01	-4.780694E-02	-1.508948E-04	7.480350E-03
C5	-5.452183E-02	-2.298046E-02	-1.357771E-04	3.493621E-03
C6	7.507045E-02	3.374474E-02	2.078855E-04	1.320977E-03
C7	2.107741E-03	-2.522294E-04	-1.503308E-06	4.746069E-05
C8	-4.746353E-03	5.099125E-04	2.508792E-06	-2.785640E-05
C9	-5.442976E-04	1.437937E-04	5.821125E-07	-1.621046E-05
C10	-1.563439E-04	-1.202802E-04	-6.378490E-07	-3.787158E-06

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature